

2002 WISCONSIN CANADA GOOSE HARVEST REPORT

Volume 13, Issue 3



Photo by: Jack Bartholmai

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2002 Regular Season Canada Goose Harvest			
<u>Zone</u>	<u>Zone Allocation</u>	<u>Est. Harvest</u>	<u>% of Allocation</u>
Collins	600	596	99%
Horicon	18,000	14,374	80%
Exterior	25,400	27,653	109%
TOTAL	44,000	42,623	97%

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INTRODUCTION

The 2002 Canada goose season represented a slightly more liberal season framework than in 2001. Lessons learned during the 2001 season, the fact that the percent of MVP in the regular season harvest declined (74% in 2001 and 68% in 2002) and that WI received a slightly larger (35% compared to 33% in the past) proportion of the MVP flyway harvest allocation allowed a less restrictive season. The estimated number of breeding pairs (286,548) of MVP geese decreased 13% compared to 2001 and was in the range that allowed for only a retrieved harvest objective of 166,000 (similar to 2001). Nest initiation by MVP geese was the latest we have recorded in 18 years of work on the breeding grounds, but a segment of the population did nest. Average clutch size decreased approximately 1 egg per nest compared to 2001. Reports from banding crews on the MVP range confirmed that gosling production was down compared to an average year, but production was not a bust. There was some concern that a portion of the goslings might not develop fully prior to the fall migration and thus not be able to make the migration. Since the breeding range is so sparsely inhabited by humans, we don't know if this occurred or to what extent. Canada geese nesting in Wisconsin had a good production year overall and their contribution to the fall harvest continues to increase.

We again split Wisconsin into 3 zones (Collins, Exterior, and Horicon) for the Regular Canada goose hunting season (Fig. 1). Mandatory harvest reporting was continued in the Exterior Zone for harvest control and monitoring purposes. We continued to use the toll free telephone reporting system for the Exterior Zone. This method continued to have good hunter support. In the Horicon and Collins zones, a tag system was employed.

The harvest estimate for the Exterior Zone was calculated from the 1-800 telephone system and then adjusted by a reporting compliance estimate of 75.8%, obtained from 2002 field compliance checks. We were able to use 712 of the Conservation Warden field compliance checks to calculate the compliance rate. For the past two years, only geese listed on the harvest record card for dates prior to the day of the warden check were used. In the past, all checks were used. We felt this overestimated the compliance rate, since it is likely that hunters who have not reported kills will report if checked by a warden. The compliance rate continues to be a serious management concern.

Harvest estimates for the tag zones were calculated from a questionnaire that was sent to 100% of permit holders for the Collins Zone and about 47% of the Horicon Zone permit holders. The questionnaire was mailed to hunters at the end of each time period. The hunters were selected randomly in proportion to the number of

hunters in each time period. Response rates for questionnaires (Table 1) for the Collins Zone (58.7%) were lower than last year (66.6%). The response rates for the Horicon Zone averaged 61.8%, which represents a slight increase compared to the 2001 response rate (60.8%).

We were not surprised that the 2002 overall harvest estimate increased, compared to 2001, due to increased tags in the Horicon and Collins Zones and a longer season in the Exterior Zone. Our estimate indicated we remained within the allowable harvest. **However, it must be noted that the official harvest estimate for Wisconsin will be the U.S. Fish and Wildlife Service (USFWS) estimate that will be published about July 1, 2003. From 1988 to 2001, our harvest estimates averaged about 13% lower than the USFWS estimates. Estimates vary because of differences in sampling techniques.**

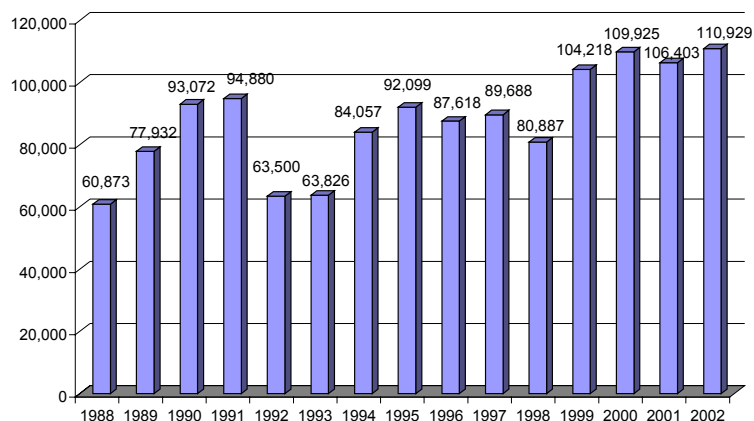
There are two reasons why Wisconsin does a harvest estimate, separate from the federal estimate. First, the USFWS requires us to monitor our Exterior Zone harvest and close the season if it appears that we will exceed our allowable harvest. Second, the USFWS harvest estimates will not be available until midsummer. It is important to have an estimate of the harvest as early as possible, so that we can begin working with our major interest groups on a season framework for the following year.

In 2002, a harvest derivation was calculated (Moser, 2002) for the regular season (after Sept. 15). The harvest derivation included band recoveries for 1998-2000. Based on that derivation, 68% percent of the Canada geese harvested in Wisconsin belong to the MVP of Canada geese. The balance of the harvest is made up as follows: 2% from the Eastern Prairie Population, 1% small Canada geese from the Tall Grass Prairie Population, and the remaining 29% are giants that nest in the Upper Great Lakes area.

PARTICIPATION - GENERAL

In 2002, 110,929 individuals received a Wisconsin Canada goose hunting permit (Table 2). This represents a 4.3% increase in hunter numbers compared to 2001. Twenty-one percent (22% last year) of Canada goose permit holders came from the 7 county area surrounding Milwaukee (Ozaukee, Washington, Waukesha, Milwaukee, Racine,

Statewide Permit Issuance



Walworth and Kenosha counties). Approximately 96% of goose permit holders are Wisconsin residents (Table 3).

In 2002, 26.2% of the individuals that applied for a tag zone (Horicon or Collins) permit did not hunt (Table 2). This decreased substantially from 2001 (32.6%) and is not surprising given the number of tags permit holders received in 2001 (1 for most Horicon Zone hunters and 2 for Collins Zone hunters) and the 1/day daily bag limit in 2001. The percent of active hunters in the Horicon Zone (74%) also increased from last year (68%). The percent of active hunters in the Collins Zone (54%) increased substantially from the 2001 level (45%).

We could not have completed the permit/tag issuance and mailing without the help and cooperation of many bureaus and individuals - Bureau of Customer Service and Licensing, Bureau of Wildlife Management, Bureau of Enterprise Information Technology and Applications Management, Department of Administration, and mail room staff. This year Exterior permits were issued over the counter, which gave us a more complete and timely data base.

Wisconsin continues to be a great place to hunt Canada geese, in the United States. There will be poor production years (as observed in 1992) and years when the MVP population is well below goal (like 2001). This will require Wisconsin to restrict its harvest. However, harvest control is paramount. Should we lose the harvest control we have now, even for one year, Wisconsin hunters could face 4 to 5 years of severely restricted seasons, to restore the MVP population to desired levels.

PARTICIPATION - EXTERIOR ZONE

Approximately 80% (77% last year) of the state's goose hunters selected the Exterior Zone (Table 2). The actual number of Exterior Zone permits issued (89,186) increased about 8.6% from last year. This increase may be due to our forecast of a longer season this year, compared to the restrictive season in 2001 when the MVP quota was low.

Everyone who selected the Exterior Zone received a permit to hunt. Applications for Exterior Zone permits were accepted and permits were issued until the last day of the Canada goose season. A season length not to exceed 94 days was approved for the North portion of the Exterior Zone, including the Brown County subzone. A season length not to exceed 92 days was approved for the South portion of the Exterior Zone, including

Permit Issuance Exterior Zone

2002 = 89,186
2001 = 82,091
2000 = 84,686
1999 = 77,921
1998 = 52,832
1997 = 54,404
1996 = 51,069
1995 = 53,104
1994 = 44,108
1993 = 30,854
1992 = 27,332
1991 = 40,094
1990 = 40,197
1989 = 33,331
1988 = 24,052

the Rock Prairie subzone. The Mississippi River Subzone season length was 70 days.

The Canada goose season in the North portion of the Exterior Zone, including the Brown County Subzone, opened on September 21 (one week before the duck season opener), continued through September 27, reopened September 28 (noon) ran the full 94 days and closed December 23. The Canada goose season in the South portion of the Exterior Zone, including the Rock Prairie Subzone, opened on September 28 (one week before the duck season opener), continued through October 4, reopened October 5 (noon) through October 13, had a five day split and reopened October 19 and closed on January 2 (92 days). The season in the Mississippi River Subzone ran from September 28 (one week before the duck season opener) through October 4, October 5 (noon) until October 13 and October 19 until December 11 (70 days). The daily bag limit was one Canada goose.

Table 3 shows the county of residence of Exterior Zone permit holders. Waukesha County again provided the greatest number of Exterior Zone permit holders, followed by Dane and Outagamie counties. Non residents accounted for 3.5% of the permit holders. Approximately 75% of the Canada goose hunters residing in the 7 counties surrounding Milwaukee chose to hunt in the Exterior Zone (72% last year, 72% in 2000 and 70% in 1999). The percent of Canada goose hunters that reside in the greater Milwaukee area and select the Exterior Zone has increased yearly, since 1994. In four of these counties (Ozaukee, Racine, Walworth and Kenosha) eighty-nine percent (87% last year, 86% in 2000, 85% in 1999, 78% in 1998, and 76% in 1997) of the hunters chose to hunt in the Exterior Zone. In the remaining greater Milwaukee counties (Milwaukee, Washington and Waukesha), the proportion of permit holders choosing the Exterior Zone (68%) was higher than last year (64% in 2001, 65% in 2000, 63% in 1999, 52% in 1998 and 43% in 1997). Many of the hunters in these three counties are continuing to select the Horicon zone

PARTICIPATION - HORICON ZONE

A total of 21,268 hunters received a Horicon zone permit (10% decrease from 2001), or 19.2% of the total number of Canada goose hunters (22% last year, 22% in 2000, 25% in 1999 and 34% in 1998). From 1988-1993, 50-56% of our Canada goose hunters selected the Horicon Zone. In 1994, only 46% of the Canada goose hunters selected the Horicon Zone. In 1995, this dropped to 41% and it remained at that level in 1996 and 1997. Nineteen percent represents the lowest percent of hunters selecting the Horicon zone, since the program was initiated in 1988.

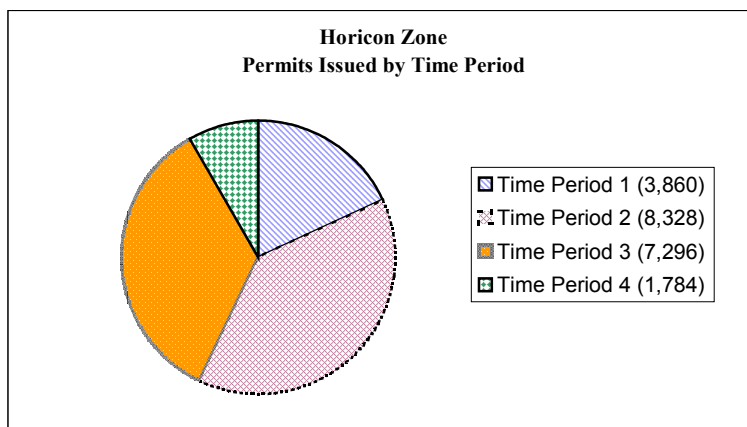
Persons selecting the Horicon Zone were required to apply by August 10. All persons properly applying received 2 tags (one in 2001, six in 2000, five in 1999, one in 1998, and two in 1997). About 16% of the Horicon Zone hunters received a third tag, in a random drawing. The Horicon Zone daily bag limit was 2 (1 in 2001).

**Permit Issuance
Horicon Zone**

2002 = 21,268
2001 = 23,697
2000 = 24,656

The overall season length in the Horicon Zone was 94 days (94 last year, 95 in 2000, 95 in 1999, 93 in 1997 and 86 days in 1996). Dates for time period one were September 16 through October 4 and October 5 (noon) through October 20, which allowed permit holders a maximum of 35 days of hunting (35 days last year), including 5 weekends (5 last year). Time period two permit holders had a maximum of 35 days to hunt (35 last year), including 5 weekends (5 last year). Their season ran from September 30 through October 4 and October 5 (noon) through November 3. Time period three opened on October 12 and continued through November 15, offering permit holders a maximum of 35 days (35 last year), including 5 weekends (5 last year). Time period four hunters had up to 47 days to hunt (47 last year), including 7 weekends (7 last year). Their season opened on November 2 and closed on December 18. Time period four again included the dates of the statewide deer gun season. Overall, 74% of those receiving a permit for the Horicon Zone hunted at least once, compared to 68% last year, 78.9% in 2000, 81% in 1999, 68% in 1998, 76% in 1997, 77% in 1996, 85% in 1995, 85% in 1994, 85% in 1993, 82% in 1992, 86% in 1991, and 88% in 1990. Participation (i.e., active hunters) was highest

1999 = 25,635
1998 = 27,356
1997 = 34,439
1996 = 35,707
1995 = 38,045
1994 = 39,062
1993 = 32,248
1992 = 35,387
1991 = 50,373
1990 = 47,980
1989 = 40,180
1988 = 32,500



in time period two (77.8%) and lowest in time period 4 (67.7%) (Table 2). Later time periods have shown a lower participation rate than the early time periods, in previous years. Non-residents accounted for approximately 6.5% of Horicon Zone hunters. Table 3 provides an estimate of Horicon Zone permit holders, by county of residence. Milwaukee County continues to provide the most hunters

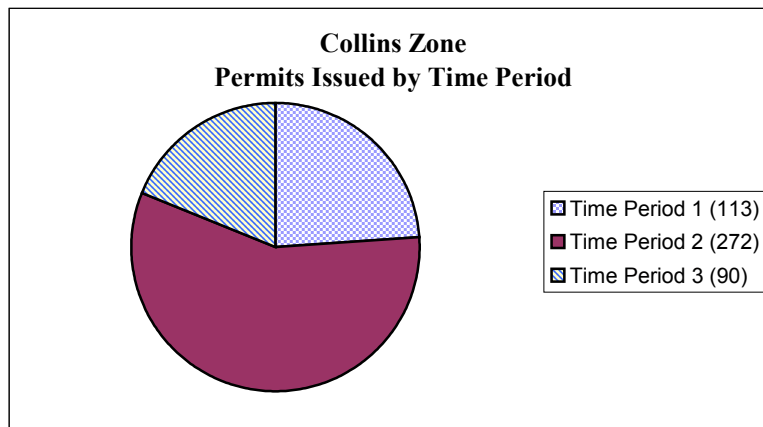
for this zone, with 9.6% of the total. Hunters from every county of the state participated in the Horicon Zone hunt. Approximately 25% of the Canada goose hunters from the 7 counties surrounding Milwaukee chose the Horicon Zone (28% last year, 28% in 2000 and 30% in 1999).

In this year's hunter questionnaire we again asked Horicon Zone hunters if they hunted Canada geese last year and in which zone they hunted. Of those Horicon Zone hunters who hunted in 2001, 94.2% reported hunting in the Horicon Zone, while 5.7% reported they hunted the Exterior Zone the previous year (Table 4). This is similar to what Horicon Zone hunters told us last year about their 2000 hunting location. In 2002, less than 1% of Horicon Zone hunters reported shifting from the Collins Zone to the Horicon Zone. Fifteen percent (14% last year) of this year's Horicon Zone hunters reported that they didn't hunt Canada Geese in 2001 (Table 5). Horicon Zone hunters were also surveyed regarding their duck hunting activity (Table 6). In 2002, 67.1% of Horicon Zone goose hunters said they also hunted ducks, somewhere in the state. This is similar to that reported in 2001 (68.5%), 2000 (65.0%) 1999 (65.4%), 1998 (68.8%), 1997 (67%), 1996 (66%), 1995 (64%) and 1994 (63.1%).

The average number of trips per hunter varied by time period (Table 7). Compared to 2001, the mean number of trips per hunter stayed the same or increased in all time periods. Factors affecting the number of trips probably included season length, number of weekends allowed to hunt, daily bag, number of tags received and hunter expectations. Estimated number of Canada goose hunting trips (51,102) in the Horicon Zone increased less than 1% compared to 2001 (50,752).

PARTICIPATION - COLLINS ZONE

Total number of hunters applying for a Collins Zone permit decreased 23%, compared to last year. The percent of active hunters (54%) was 9% higher than that observed in 2001 (45%).



The Collins Zone season was divided into three time periods, with 475 permits issued. All permit holders received three tags (two in 2001). Season lengths for time periods one through three were 21, 21 and 26 days, respectively. All three time periods included 3 weekends. The total season length was 68 days. The daily bag was 2 (2 in 2001), with a possession limit of three. The first time period opened September 16 and the last time period ended November 22. The goose season in this zone was closed during the 9-day statewide deer gun season (Nov. 22 – Nov. 30). Outagamie County provided the largest number of hunters (21%) to the Collins Zone, followed by Manitowoc (17%), Winnebago (14%) and Sheboygan (12%) counties (Table 3).

***Permit Issuance
Collins Zone***

The average number of trips for Collins Zone hunters varied between 4.5 and 4.9, depending on the time period. The average was 4.6 trips (4 in 2001, 4.9 in 2000, 4.5 in 1999, 2.3 in 1998, 3.5 in 1997, 3.6 in 1996, 4.3 in 1995 and 4.0 reported in 1994). The mean number of trips at Collins was highest in time period three (Table 7).

2002 = 475
2001 = 615
2000 = 583
1999 = 662
1998 = 699
1997 = 845
1996 = 839
1995 = 950
1994 = 887
1993 = 724
1992 = 781
1991 = 969
1990 = 1,197
1989 = 1,303
1988 = 975

CANADA GOOSE POPULATIONS

The first noticeable migration of a few thousand Canada geese into the Horicon area occurred on September 14 (we're not sure what percent of these geese are Interior migrants versus molt migrant Giants). By Oct 1, there were an estimated 50,000 Canada geese on HNWR and by the first week in November, this peaked at 300,000 or more. Approximately 150,000 geese remained at HNWR through the winter holidays, due to lack of snow, though they were confined to a few open water sites. The Midwinter Waterfowl Survey conducted during the week of January 6th showed 276,986 Canada geese in the state. Canada geese were spread out all across the state, from Lake Superior in the north to the Wisconsin/Illinois state line in the south.

The trend for geese to be more widely dispersed both inside and outside the Horicon Zone continues. This fact greatly limits the value of weekly surveys and thus these surveys have been dropped. The surveys represented population trends, at best, on historically counted areas. Since the counts were made in only a portion of east central Wisconsin, they were not accurate. Geese are now dispersed over many other new sites.

AGRICULTURAL CONCERNS

The following is preliminary agricultural damage information, provided by the United States Department of Agriculture-Wildlife Services (USDA), for those counties in Wisconsin who report animal damage claims to USDA. There were 634 complaints involving Canada goose damage, a 19% increase compared to last year (533). The number of actual claims for 2002 was 20, compared to 24 last year. The assessed damage value in 2002 was about \$23,000 compared to \$25,763 last year. In addition, 11 goose damage claims (\$14,747.93) have been filed, in 6 other counties not enrolled by USDAWS. In 2001, 10 claims totaling \$24,112.70 were filed. In total, 31 claims for Canada goose damage were filed in 2002 for an assessed value of about \$37,700. In the Horicon Zone, preliminary numbers show there were 158 complaints, 4 actual claims and \$2,556 assessed damage for 2002. The amount of damage paid was fairly low and may be the result of geese feeding farther from problem areas near Horicon Marsh, in recent years. Similar information for the rest of the state is not available at this time. The bulk of the agricultural damage is occurring outside of the Horicon Zone.

Thirteen (11 in 2001) farmers obtained and made available special Agricultural Harvest Permits and 213 (262 in 2001) Canada geese were reported taken under these permits (approximately 900 permits issued). Although this program continues to be used only sparingly, the agricultural community sees it as a major step by the Mississippi Flyway Council and the Service towards addressing their crop damage concerns.

Canada goose damage in Wisconsin is not limited to the Horicon Zone!

HARVEST - GENERAL

The statewide Canada goose maximum allowable harvest was 44,000 compared to 41,500 in 2001, 79,400 in 2000, 75,300 in 1999, 28,000 in 1998, 51,200 in 1997, 65,100 in 1996 and 113,900 in 1995. The estimated harvest was 42,623 (97% of the quota). Table 8 lists the harvest estimates by zone and time period. The Exterior Zone harvest is calculated from mandatory reporting and adjusted for non-reporting (75.8%). Overall, our estimate of the 2002 harvest was within the allowable objective (Table 9). This is good news and demonstrates that our basic Canada goose harvest system works.

HARVEST - BY COUNTY

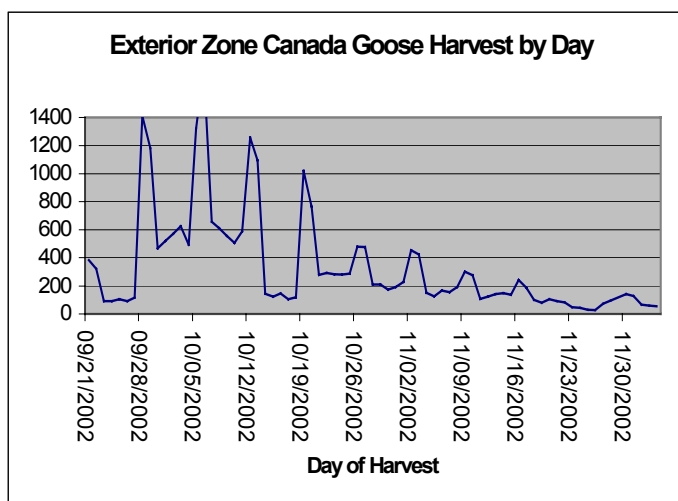
The estimated harvest by county in the Exterior Zone (Figure 1), using mandatory reporting data, is shown in Table 10. The top ten Exterior Zone

counties for goose harvest in 2002 listed in descending order are: Manitowoc, Brown, Outagamie, Dane, Kewaunee, Dodge, Waukesha, Sheboygan, Racine and Racine. The Exterior Zone boundary was changed in 1990 and 2001 adding substantial new portions of Columbia and Marquette counties to the Exterior Zone. The effects of these changes continue to be apparent, in terms of harvest. In 1989, these two counties accounted for 3.4% of the Exterior Zone harvest. Since the boundary change, they've averaged 5.0% to 12.5% of the Exterior Zone harvest. 2002 is the lowest harvest for these counties (3.3%) in recent years.

The Horicon Zone goose harvest by county is shown in Table 11. Dodge is the leading county, followed by Fond du Lac, contributing to Horicon Zone harvest.

HARVEST – DAY OF THE SEASON

The daily pattern of harvest in the Exterior Zone during the season is given in Table 12. The daily bag limit for the Exterior Zone and its subzones was one goose for the entire season. The Canada goose season in the North portion of the Exterior Zone, excluding the Mississippi River Subzone (MRS), ran from September 21 through September 27, and September 28 (noon) through December 23. The Canada goose season in the South portion of the Exterior Zone, excluding the Mississippi River Subzone (MRS), ran from September 28 through October, and October 5 (noon) through October 13. There was a 5 day split (October 14-18), and the season reopened on October 19 until January 2.



The Brown County Subzone ran concurrent with the North portion of the Exterior Zone and the Rock Prairie Subzone ran concurrent with the South portion of the Exterior Zone. The season in the MRS ran from September 28 through October 4 and October 5 (noon) through October 13. There was a 5 day split (October 14-18), and the season reopened October 19 until December 11 (70 days).

The quota for the (MRS) was 500. The MRS consists of land and water areas of 8 counties bordering the Mississippi River. Only a portion of each county's surface area is within the MRS. The majority of each county's land and water area is in the Southern Duck Zone portion of the Exterior Zone. Canada geese harvested in the Exterior Zone are not reported by subzone. In 1999, we conducted a mail survey to determine how many Canada geese were being harvested within the MRS. We found that 73% of the Canada geese harvested in MRS counties were actually harvested within the MRS (based on mail survey). We estimated the harvest in the MRS by multiplying the reported county kill by the proportion of the kill that was reported for the MRS, from the 1999 independent mail survey. No adjustment was made for non-response bias. The total harvest of Canada geese from the 8 MRS counties was 1,564. This equates to 1,142 Canada geese being harvested within the MRS.

HARVEST - DAY OF THE WEEK

The pattern of harvest by day of week (Table 13) was similar to past years. Approximately, 54% of the harvest occurred on Saturdays and Sundays (51% last year). In the Horicon Zone, Saturdays and Sundays accounted for 33% and 21% of the harvest respectively, compared to 26% and 17%, respectively in 2001. The percent of harvest that occurred on weekends has been fairly constant, since we began looking at this statistic in 1989. The percent of harvest that occurred on weekends (39%) in the Collins Zone was slightly lower than last year (46%).

About 54% of the harvest in the Exterior Zone occurred on weekends (53% last year). Weekend days generally had over twice the harvest of any given weekday. This pattern has been consistent since 1989, when we began looking at the harvest by the day of the week.

HARVEST - TAGS

Success rates of active hunters filling their tag varied by zone and time period (Table 14). The success rates for active hunters filling their first tag in the Horicon Zone were between 50.6% and 57.3%. This was similar to last year's success rates (49.5% to 60.1%). The success rate in Horicon Zone time period 1 for the first tag (56.8%) was substantially lower than last year (60.1%) 54.6% in 2000, 68.0% in 1999, 58.9 in 1998, 60.5% in 1997, 62% in 1996 and 63.6% in 1995). The success rate for filling their first tag in time period 2 was 57.3%, up compared to 55.5% in 2001, 52.2% in 2000, 64.3% in 1999 and 60.0% first tag success rate observed in 1998. The success rate for time period 3 active hunters in filling their first tag was 50.6%, compared to 49.5%, in 2001, 45.1%

in 2000, 56.7% in 1999 and 56.5% in 1998. Time period 3 had the lowest success rate for active hunters, which is surprising because it is during this time period or time period 4 that Canada goose numbers within the Horicon Zone typically peak. Hunter success rate for filling their first tag during time period 4 was 54.9%. That rate compares to the 54% in 2001, 45.8% in 2000, 67.9% in 1999 and 61.3% success rate of filling the first tag in 1998. Success rates for the remaining tags varied by time period and did not exceed 36.6% (Table 14).

The success rate for time period 1 active hunters filling their first tag in the Collins Zone (96.3%) was higher compared to 2001 (89.5%). It was higher (94.9%) compared to 2001 (89%) in time period 2 and higher (93.3%) compared to last year (90.0%) for time period 3. Success rates for filling the second and third tags declined for each time period. Success rates for the Collins Zone have been traditionally higher than the Horicon Zone.

We calculate success rates annually. Previous year success rates are used in a model, to determine the number of tags we may issue in a given year.

The actual daily bag for successful hunters varied by zone (Table 15). In the Horicon and Collins zones, the daily bag limit was two birds, while in the Exterior Zone the daily bag limit was only one. In the Horicon Zone, 75.6% (62.1% in 2000, the last time the daily bag limit was 2) consisted of only 1 goose while 24.4% (37.9% in 2000) consisted of 2 birds. In the Collins Zone, 79.3% (75.7% in 2000, the last time the daily bag limit was 2) consisted of only 1 goose while 20.7% (24.3% in 2000) consisted of 2 birds.

HARVEST - PERMIT HOLDERS

Collins Zone hunters averaged the highest bag (1.25) per permit holder, followed by Horicon (0.68) and Exterior Zone hunters (0.31) (Table 16). This trend is similar to previous years. For the Horicon Zone, Canada geese per permit holder and Canada geese per active permit holder were up compared to last year. Canada geese per permit holder and active permit holder were also up in the Collins Zone. These increases were expected, given the season bag was 2 or 3 Canada geese this year, compared to 1 or 2 Canada geese in 2001. We have no estimate of the number of active Exterior Zone hunters but Canada geese per permit holder (0.31) increased, compared to last year (0.22).

Approximately, 10.7% of the Exterior Zone permit holders reported harvesting Canada geese in 2002. Five thousand one hundred and sixty-one Exterior Zone hunters reported harvesting one goose. This is up 46% from last year. Two thousand one hundred and fifty-four harvested two geese, up 54% from last year. Three hundred forty-one hunters reported harvesting eight or more geese in the Exterior Zone. This compares to 134 in 2001, 357 in 2000, 419 in 1999, 40 in 1998, 167 in 1997, 156 in 1996, 328 in 1995, 219 in 1994, 144 in 1993, 119 in 1992, 268 in 1991 and 256 in 1990 (Table 17). We expected an increase in the number of hunters harvesting multiple Canada geese during the season because the season opened earlier in the fall and hunters enjoyed a longer season.

HARVEST - PRIVATE VERSUS PUBLIC LANDS

Hunter use of private lands continues to vary by tag zone (Table 18). In the Collins Zone, state lands continue to receive more hunting pressure than adjacent private lands. Of the Collins Zone hunters that responded to this question, 43.1% of the hunters reported spending less than 25% of their hunting time on private land (34.5% last year). The reverse continues to be true for the Horicon Zone. Of the hunters that responded to the question 55% (49% last year), said they spent 75% or more of their hunting time on private lands.

Table 19 summarizes the reported hunter use of the Horicon Zone's Intensive Management Subzone (IMS), by time period. The percent of hunters using the IMS (33.3%) was higher than last year (30.1%); though there has been a downward trend since 1995. Those electing to hunt in IMS used it slightly more (89.6%) than in previous years (83.8% in 2000, 87.7% in 1999, 88.5% in 1997 and 87.5 in 1996). The exceptions were in 1998 (91.4%) and 2001 (90.2%) when Horicon Zone hunters faced a more restrictive season.

30%

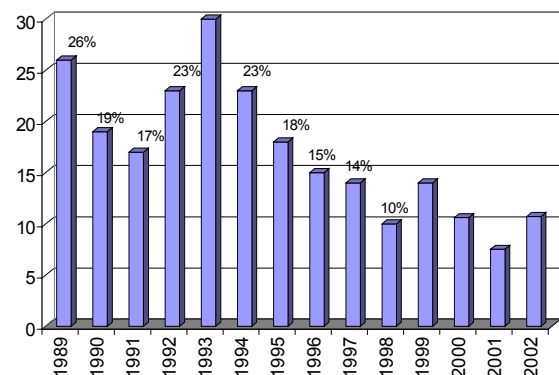
14%

10.6%

10.7%

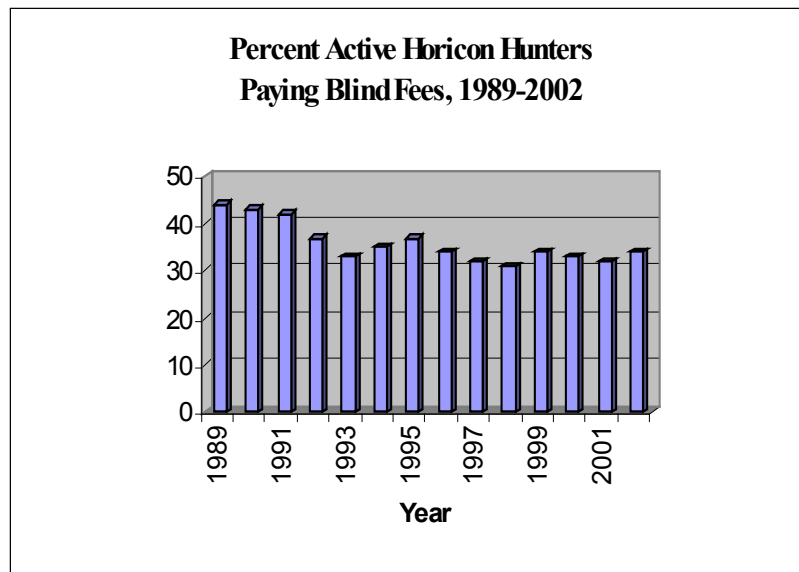
7.5%

Percent of Exterior Zone Hunters Reported Harvesting Canada Geese from 1989-2002



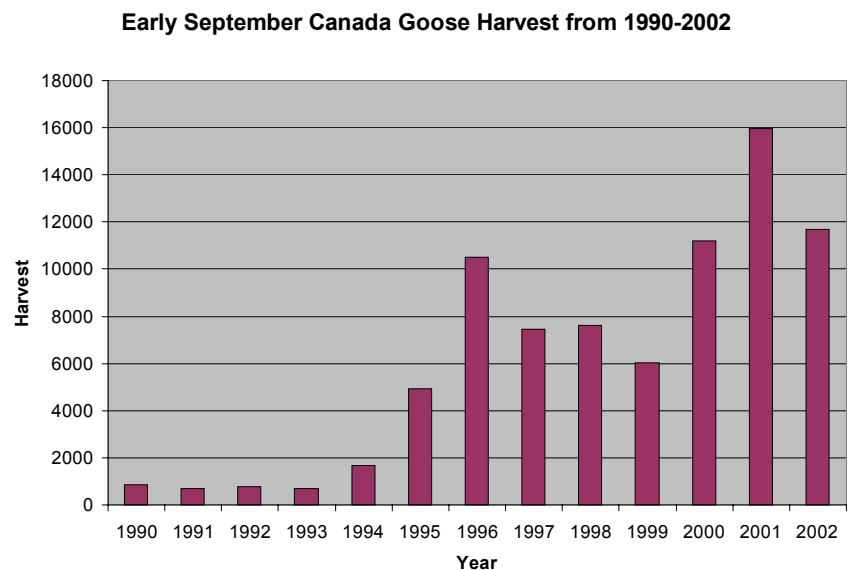
ACCESS FEE

In the Collins Zone, 17.2% of the hunters reported paying access or blind fees to hunt on private lands (Table 20). In the Horicon Zone, 33.9% of the hunters reported paying a hunting fee. Although this is not the lowest percent we've observed in the Horicon zone, the percent paying blind fees has stabilized around 33%.



EARLY SEPTEMBER CANADA GOOSE HUNT

A total of 75,565 individuals received a permit to participate in the statewide Early September Canada goose season (74,268 last year)(Table 21). We anticipate this number will increase in the next few years, with the statewide season. A special permit and mandatory harvest reporting was required of those who participated in this hunt. In 2002, the 13-day season dates were September 3-15. The season included two full



weekends. The season again was closed over the 3-day Labor Day weekend, to prevent hunter and non-hunter conflicts during the last major recreational holiday weekend of summer. We continued with two subzones (Figure 2).

We used the toll free 1-800 phone reporting system this year, for the early September season. We calculated a reporting compliance rate of 77.2% (57.1% last year), based on 101 usable warden compliance checks. Again, we excluded geese reported the day of and after the hunter was checked, by a warden. This was higher than the 2001 Exterior Zone compliance rate.

The final Canada goose harvest estimate for the Early September season was 11,678 birds (15,952 birds in 2001)(Table 21). 2001 represented the highest harvest we observed, since the seasons were initiated in 1990. We are not sure why the harvest declined in 2002. The top harvest counties for the Early September season were Manitowoc (841) Brown (666), Shawano (594) Door (529) and Washington (506) (Table 23).

Twenty-three percent of the harvest occurred on the first day of the season, despite opening day occurring on a Tuesday this year. Last year, opening day was on a Tuesday and 22% of the harvest occurred on that day. Approximately 12% of the total harvest occurred on the second day of the season, also a weekday this year. As the season progressed, weekend days generally had higher harvest levels than weekdays (Table 22).

Approximately, 3.9% of the Early September permit holders reported harvesting Canada geese in 2002. 956 Early September hunters harvested only one goose. 652 hunters reported harvesting two geese, 494 hunters harvested three geese, 248 hunters harvested four geese. 177 hunters reported harvesting 8 or more geese during the Early September Canada goose season (Table 24).

ALL SEASONS COMBINED TOTAL CANADA GOOSE HARVEST

Approximately 54,300 Canada geese were harvested in Wisconsin, in 2002. Dodge county lead the state in total Canada goose harvest, followed by Fond du Lac and Manitowoc counties. Brown county registered the 4th highest harvest and Green Lake county was 5th. (Table 25).

Assuming all of the Canada geese harvested during the Early September season are Wisconsin giants (11,678), 21% (8,950) of the regular season harvest (42,623) are Wisconsin giants, and 21% (45) of the agricultural tag harvest (213) in the Horicon Zone are Wisconsin giants, we estimate that a total of 20,673 Wisconsin giants were harvested in 2002. This represents a harvest rate of about 14.4% of the spring population.

LITERATURE CITED

Tim Moser. June 16, 2003 memo listing Canada goose harvest derivations. Unpublished.

Table 1. *Number of surveys mailed, returned, and response rate for the 2002 Canada goose season.*

Zone and Period	# Mailed	# Returned	Percent Response
Horicon 1	1,644	878	53.4%
Horicon 2	3,535	2,175	61.5%
Horicon 3	3,043	1,868	61.4%
Horicon 4	1,778	1,254	70.5%
Collins 1	113	51	45.1%
Collins 2	272	174	64.0%
Collins 3	90	54	60.0%
Total	10,475	6,454	61.6%

Table 2. *Permits issued, active hunters, percent active, and number of successful hunters by zone and time period. Active and successful hunters derived from questionnaire data. Percent successful applies to active permit holders, except for Exterior Zone where it applies to all permit holders.*

Zone and Period	Permits Issued (hunters)	Active Hunters	% Active	# Successful	% Successful
Horicon 1	3,860	2,741	71.0%	1,554	56.8%
Horicon 2	8,328	6,479	77.8%	3,713	57.3%
Horicon 3	7,296	5,370	73.6%	2,717	50.6%
Horicon 4	1,784	1,208	67.7%	663	54.9%
Collins 1	113	37	54.9%	60	96.3%
Collins 2	272	119	67.2%	173	94.9%
Collins 3	90	100	55.6%	47	93.3%
Exterior	89,186			9,854	11.0%
Total	110,929			18,781	%

Table 3. *Number of people in each county who applied for a particular zone, and the percentage of each zones total applicants that number represents. The first row in the number of applicants and the second row is the percent for that zone (Continued on next two pages).*

County	Horicon		Collins		Exterior	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Adams	21	0.1%	0	0.0%	261	0.3%

County	Horicon		Collins		Exterior	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Ashland	3	0.0%	0	0.0%	327	0.4%
Barron	6	0.0%	0	0.0%	1,394	1.6%
Bayfield	2	0.0%	0	0.0%	300	0.3%
Brown	105	0.5%	27	5.7%	2,851	3.2%
Buffalo	47	0.2%	0	0.0%	456	0.5%
Burnett	1	0.0%	0	0.0%	607	0.7%
Calumet	31	0.1%	39	8.2%	668	0.7%
Chippewa	30	0.1%	0	0.0%	1,061	1.2%
Clark	16	0.1%	1	0.2%	476	0.5%
Columbia	828	3.9%	1	0.2%	1,548	1.7%
Crawford	101	0.5%	0	0.0%	422	0.5%
Dane	1,278	6.0%	3	0.6%	5,221	5.9%
Dodge	1,679	7.9%	4	0.8%	523	0.6%
Door	10	0.0%	0	0.0%	767	0.9%
Douglas	6	0.0%	0	0.0%	688	0.8%
Dunn	50	0.2%	0	0.0%	668	0.7%
Eau Claire	152	0.7%	3	0.6%	1,349	1.5%
Florence	4	0.0%	0	0.0%	78	0.1%
Fond Du Lac	1,832	8.6%	1	0.2%	1,030	1.2%
Forest	15	0.1%	0	0.0%	212	0.2%
Grant	293	1.4%	2	0.4%	553	0.6%
Green	116	0.5%	0	0.0%	661	0.7%
Green Lake	704	3.3%	0	0.0%	275	0.3%
Iowa	87	0.4%	1	0.2%	370	0.4%
Iron	5	0.0%	0	0.0%	158	0.2%
Jackson	22	0.1%	0	0.0%	375	0.4%
Jefferson	343	1.6%	0	0.0%	2,187	2.5%
Juneau	46	0.2%	0	0.0%	765	0.9%
Kenosha	160	0.8%	1	0.2%	1,279	1.4%
Kewaunee	8	0.0%	6	1.3%	606	0.7%
La Crosse	342	1.6%	6	1.3%	2,273	2.5%
Lafayette	55	0.3%	0	0.0%	270	0.3%
Langlade	27	0.1%	0	0.0%	354	0.4%
Lincoln	114	0.5%	0	0.0%	689	0.8%
Manitowoc	58	0.3%	79	16.6%	1,966	2.2%
Marathon	263	1.2%	5	1.1%	1,761	2.0%
Marinette	24	0.1%	0	0.0%	1,003	1.1%
Marquette	184	0.9%	0	0.0%	784	0.9%
Menominee	1	0.0%	0	0.0%	6	0.0%
Milwaukee	2,038	9.6%	8	1.7%	3,298	3.7%
Monroe	58	0.3%	1	0.2%	772	0.9%
Oconto	17	0.1%	1	0.2%	865	1.0%
Oneida	138	0.6%	1	0.2%	999	1.1%
Outagamie	495	2.3%	98	20.6%	3,663	4.1%
Ozaukee	285	1.3%	5	1.1%	1,365	1.5%
Pepin	22	0.1%	0	0.0%	190	0.2%
Pierce	10	0.0%	0	0.0%	898	1.0%

County	Horicon		Collins		Exterior	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Polk	4	0.0%	0	0.0%	1,451	1.6%
Portage	234	1.1%	4	0.8%	1,450	1.6%
Price	26	0.1%	0	0.0%	386	0.4%
Racine	246	1.2%	11	2.3%	2,738	3.1%
Richland	68	0.3%	0	0.0%	186	0.2%
Rock	546	2.6%	0	0.0%	2,711	3.0%
Rusk	5	0.0%	0	0.0%	305	0.3%
St. Croix	17	0.1%	0	0.0%	1,775	2.0%
Sauk	296	1.4%	1	0.2%	1,302	1.5%
Sawyer	10	0.0%	0	0.0%	400	0.4%
Shawano	61	0.3%	1	0.2%	833	0.9%
Sheboygan	317	1.5%	56	11.8%	2,492	2.8%
Taylor	8	0.0%	0	0.0%	378	0.4%
Trempealeau	59	0.3%	0	0.0%	753	0.8%
Vernon	129	0.6%	1	0.2%	458	0.5%
Vilas	75	0.4%	6	1.3%	443	0.5%
Walworth	143	0.7%	0	0.0%	1,672	1.9%
Washburn	4	0.0%	0	0.0%	706	0.8%
Washington	1,036	4.9%	2	0.4%	1,973	2.2%
Waukesha	1,967	9.3%	8	1.7%	5,408	6.1%
Waupaca	141	0.7%	8	1.7%	1,482	1.7%
Waushara	86	0.4%	2	0.4%	650	0.7%
Winnebago	1,145	5.4%	64	13.5%	2,991	3.4%
Wood	249	1.2%	1	0.2%	2,170	2.4%
Unknown	870	4.1%	2	0.4%	2,249	2.5%
Non. Resident	1,389	6.5%	15	3.2%	2,532	2.8%
Total	21,263		475		89,186	

Table 4. *Goose hunting in past zones.*

Current Zone	Past Collins	Past Horicon	Past Exterior
Collins	91.9%	2.3%	5.8%
Horicon	0.1%	94.2%	5.7%

Table 5. *Percent hunting geese in 2002 that also hunted in 2001.*

Zone	% That Hunted in 2001
Collins	84.8%
Horicon	84.9%

Table 6. *Past and present duck hunting by goose permit.*

Zone	Duck Hunted in 2001	Duck Hunted in 2002
Collins	65.9%	70.5%
Horicon	63.5%	67.1%

Table 7. Mean number of hunting trips by zone and time period. Applies to active permit holders only.

Zone/Period	Mean # of Trips	Maximum # of Trips
Collins 1	4.5	12
Collins 2	4.5	14
Collins 3	4.9	10
Horicon 1	3.1	31
Horicon 2	3.3	25
Horicon 3	3.3	30
Horicon 4	2.9	35

Table 8. Harvest by zone and time period. The estimated harvest was derived from questionnaire data in the Collins and Horicon zones. Reported harvest in the Exterior Zone is from mandatory reporting. The reported harvest for the Exterior zone was adjusted by an overall compliance rate of 75.8% to obtain the estimated harvest.

Zone/Period	Estimated Harvest	Reported Harvest
Collins 1	131	
Collins 2	380	
Collins 3	85	
Horicon 1	2,658	
Horicon 2	6,285	
Horicon 3	4,296	
Horicon 4	1,135	
Exterior	27,653	20,949
Total	42,623	

Table 9. Flyway allocation and estimated harvest by zone.

Zone	Allocation	Harvest	% of Allocation
Collins	600	596	99.3%
Horicon	18,000	14,374	79.9%
Exterior	25,400	27,653	108.9%

Total	44,000	42,623	96.9%
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Table 10. *Exterior zone goose harvest by county (continued on next page).*

County	Reported Kill	Expanded Kill	Percent
Adams	264	348	1.3%
Ashland	58	77	0.3%
Barron	292	385	1.4%
Bayfield	69	91	0.3%
Brown	1,210	1,597	5.8%
Buffalo	212	280	1.0%
Burnett	289	381	1.4%
Calumet	230	304	1.1%
Chippewa	451	595	2.2%
Clark	369	487	1.8%
Columbia	252	333	1.2%
Crawford	61	81	0.3%
Dane	852	1,125	4.1%
Dodge	735	970	3.5%
Door	370	488	1.8%
Douglas	93	123	0.4%
Dunn	95	125	0.5%
Eau Claire	156	206	0.7%
Florence	21	28	0.1%
Fond Du Lac	122	161	0.6%
Forest	10	13	0.0%
Grant	201	265	1.0%
Green	70	92	0.3%
Iowa	26	34	0.1%
Iron	28	37	0.1%
Jackson	42	55	0.2%
Jefferson	472	623	2.3%
Juneau	267	352	1.3%
Kenosha	417	550	2.0%
Kewaunee	815	1,076	3.9%
La Crosse	168	222	0.8%
Lafayette	77	102	0.4%
Langlade	62	82	0.3%
Lincoln	211	279	1.0%
Manitowoc	1,391	1,836	6.6%
Marathon	220	290	1.1%
Marinette	254	335	1.2%
Marquette	440	581	2.1%
Milwaukee	10	13	0.0%
Monroe	181	239	0.9%
Oconto	255	337	1.2%
Oneida	69	91	0.3%

County	Reported Kill	Expanded Kill	Percent
Outagamie	863	1,139	4.1%
Ozaukee	398	525	1.9%
Pepin	83	110	0.4%
Pierce	293	387	1.4%
Polk	425	561	2.0%
Portage	187	247	0.9%
Price	66	87	0.3%
Racine	551	727	2.6%
Richland	27	36	0.1%
Rock	350	462	1.7%
Rusk	131	173	0.6%
Sauk	101	133	0.5%
Sawyer	137	181	0.7%
Shawano	176	232	0.8%
Sheboygan	695	917	3.3%
St. Croix	493	651	2.4%
Taylor	259	342	1.2%
Trempealeau	248	327	1.2%
Vernon	38	50	0.2%
Vilas	127	168	0.6%
Walworth	511	675	2.4%
Washburn	321	424	1.5%
Washington	402	531	1.9%
Waukesha	699	923	3.3%
Waupaca	455	601	2.2%
Waushara	354	467	1.7%
Winnebago	382	504	1.8%
Wood	289	381	1.4%
Unknown	1	1	0.0%
Total	20,949	27,653	

Table 11. Horicon Zone goose harvest by county. The estimated harvest was derived from questionnaire data.

County	Total Estimated Harvest	% of Harvest
Columbia	446	3.1%
Dodge	7,848	54.6%
Fond du lac	3,162	22.0%
Green Lake	1,840	12.8%
Marquette	374	2.6%
Washington	532	3.7%
Winnebago	172	1.2%

Total**14,374****Table 12.** Exterior zone goose harvest by date. *Bold numbers indicate weekends (continued on the next two pages). R= Reported, E= Expanded, C= Cumulative, N= North, S= South*

<u>Kill Date</u>	<u>R</u> North	<u>E</u> North	<u>Cum</u> N Harvest	<u>Cum</u> North %	<u>R</u> South	<u>E</u> South	<u>Cum</u> S Harvest	<u>Cum</u> South %	<u>Cum</u> Harvest	<u>Cum</u> Percent
09/21/2002	291	385	293	3.49		-	47*	0.28	340	1.34%
09/22/2002	243	321	614	7.31		-	62*	0.36	676	2.66%
09/23/2002	68	90	704	8.38		-	62 *	0.36	766	3.02%
09/24/2002	69	91	795	9.47		-	62*	0.36	857	3.37%
09/25/2002	79	104	900	10.71		-	62*	0.36	962	3.79%
09/26/2002	69	91	991	11.79		-	62*	0.36	1,053	4.14%
09/27/2002	88	116	1,107	13.18		-	62*	0.36	1,169	4.60%
09/28/2002	273	361	1,468	17.47	795	1,051	1,113	6.54	2,580	10.16%
09/29/2002	276	365	1,832	21.81	619	818	1,930	11.36	3,763	14.81%
09/30/2002	114	151	1,983	23.61	241	318	2,249	13.23	4,232	16.66%
10/01/2002	150	198	2,181	25.97	244	322	2,571	15.13	4,753	18.71%
10/02/2002	145	192	2,373	28.25	289	382	2,953	17.37	5,326	20.97%
10/03/2002	158	209	2,582	30.73	315	416	3,369	19.82	5,951	23.43%
10/04/2002	119	157	2,739	32.61	254	336	3,705	21.79	6,444	25.37%
10/05/2002	335	443	3,182	37.88	664	877	4,583	26.96	7,764	30.57%
10/06/2002	278	367	3,549	42.25	1049	1,386	5,969	35.11	9,518	37.47%
10/07/2002	108	143	3,692	43.95	389	514	6,483	38.13	10,174	40.06%
10/08/2002	113	149	3,841	45.73	351	464	6,946	40.86	10,787	42.47%
10/09/2002	104	137	3,978	47.36	317	419	7,365	43.33	11,344	44.66%
10/10/2002	98	129	4,108	48.90	287	379	7,745	45.56	11,853	46.66%
10/11/2002	121	160	4,268	50.81	325	429	8,174	48.08	12,442	48.98%
10/12/2002	256	338	4,606	54.83	696	920	9,094	53.49	13,700	53.94%
10/13/2002	217	287	4,893	58.25	612	809	9,902	58.25	14,795	58.25%
10/14/2002	43	57	4,950	58.92	66	87	9,990	58.76	14,939	58.82%
10/15/2002	43	57	5,006	59.60	51	67	10,057	59.16	15,064	59.31%
10/16/2002	52	69	5,075	60.42	58	77	10,134	59.61	15,209	59.88%
10/17/2002	34	45	5,120	60.95	46	61	10,194	59.97	15,315	60.29%
10/18/2002	25	33	5,153	61.35	65	86	10,280	60.47	15,433	60.76%
10/19/2002	182	240	5,394	64.21	591	781	11,061	65.07	16,455	64.78%
10/20/2002	168	222	5,616	66.85	411	543	11,604	68.26	17,220	67.80%
10/21/2002	43	57	5,672	67.53	167	221	11,825	69.56	17,498	68.89%
10/22/2002	50	66	5,738	68.32	172	227	12,052	70.90	17,791	70.04%
10/23/2002	48	63	5,802	69.07	167	221	12,273	72.19	18,075	71.16%
10/24/2002	56	74	5,876	69.95	158	209	12,482	73.42	18,358	72.27%
10/25/2002	75	99	5,975	71.13	144	190	12,672	74.54	18,647	73.41%
10/26/2002	88	116	6,091	72.52	274	362	13,034	76.67	19,125	75.30%
10/27/2002	84	111	6,202	73.84	277	366	13,400	78.82	19,603	77.18%
10/28/2002	40	53	6,255	74.47	120	159	13,559	79.76	19,814	78.01%
10/29/2002	44	58	6,313	75.16	116	153	13,712	80.66	20,025	78.84%
10/30/2002	31	41	6,354	75.65	100	132	13,844	81.44	20,198	79.52%
10/31/2002	29	38	6,393	76.10	115	152	13,996	82.33	20,389	80.27%

11/01/2002	34	45	6,438	76.64	139	184	14,180	83.41	20,617	81.17%
11/02/2002	76	100	6,538	77.83	267	353	14,533	85.49	21,071	82.96%
11/03/2002	54	71	6,609	78.68	267	353	14,885	87.56	21,495	84.63%
<u>Kill Date</u>	<u>R</u>	<u>E</u>	<u>Cum</u>	<u>Cum</u>	<u>R</u>	<u>E</u>	<u>Cum</u>	<u>Cum</u>	<u>Cum</u>	<u>Cum</u>
	North	North	N	North %	South	South	S	South %	Harvest	Percent
			Harvest				Harvest			
11/04/2002	32	42	6,652	79.19	83	110	14,995	88.21	21,647	85.22%
11/05/2002	25	33	6,685	79.58	70	92	15,088	88.75	21,772	85.72%
11/06/2002	28	37	6,722	80.02	98	129	15,217	89.51	21,939	86.37%
11/07/2002	35	46	6,768	80.57	84	111	15,328	90.17	22,096	86.99%
11/08/2002	22	29	6,797	80.92	123	163	15,491	91.12	22,288	87.75%
11/09/2002	54	71	6,868	81.77	174	230	15,721	92.47	22,589	88.93%
11/10/2002	44	58	6,926	82.46	165	218	15,939	93.76	22,865	90.02%
11/11/2002	19	25	6,952	82.76	63	83	16,022	94.25	22,973	90.45%
11/12/2002	28	37	6,989	83.20	65	86	16,108	94.75	23,096	90.93%
11/13/2002	23	30	7,019	83.56	84	111	16,219	95.40	23,238	91.49%
11/14/2002	24	32	7,051	83.94	89	118	16,336	96.10	23,387	92.07%
11/15/2002	13	17	7,068	84.14	91	120	16,457	96.80	23,524	92.62%
11/16/2002	37	49	7,117	84.72	147	194	16,651	97.95	23,768	93.57%
11/17/2002	24	32	7,148	85.10	117	155	16,805	98.86	23,954	94.31%
11/18/2002	13	17	7,166	85.30	63	83	16,889	99.35	24,054	94.70%
11/19/2002	13	17	7,183	85.51	48	63	16,952	99.72	24,135	95.02%
11/20/2002	15	20	7,203	85.75	64	85	17,037	100.22	24,239	95.43%
11/21/2002	13	17	7,220	85.95	56	74	17,111	100.65	24,330	95.79%
11/22/2002	10	13	7,233	86.11	52	69	17,179	101.06	24,412	96.11%
11/23/2002	5	7	7,240	86.19	31	41	17,220	101.30	24,460	96.30%
11/24/2002	7	9	7,249	86.30	26	34	17,255	101.50	24,504	96.47%
11/25/2002	4	5	7,254	86.36	19	25	17,280	101.65	24,534	96.59%
11/26/2002	12	16	7,270	86.55	21	28	17,308	101.81	24,578	96.76%
11/27/2002	8	11	7,281	86.67	44	58	17,366	102.15	24,646	97.03%
11/28/2002	7	9	7,290	86.78	64	85	17,450	102.65	24,740	97.40%
11/29/2002	13	17	7,307	86.99	84	111	17,561	103.30	24,868	97.91%
11/30/2002	5	7	7,314	87.07	93	123	17,684	104.02	24,998	98.42%
12/01/2002	1	1	7,315	87.08	91	120	17,804	104.73	25,119	98.90%
12/02/2002	2	3	7,318	87.11	50	66	17,871	105.12	25,188	99.17%
12/03/2002	5	7	7,324	87.19	42	55	17,926	105.45	25,250	99.41%
12/04/2002	5	7	7,331	87.27	36	48	17,974	105.73	25,304	99.62%
12/05/2002	15	20	7,351	87.51	44	58	18,032	106.07	25,382	99.93%
12/06/2002	19	25	7,376	87.81	71	94	18,126	106.62	25,501	100.40%
12/07/2002	14	18	7,394	88.03	149	197	18,322	107.78	25,717	101.25%
12/08/2002	6	8	7,402	88.12	123	163	18,485	108.74	25,887	101.92%
12/09/2002	8	11	7,413	88.25	24	32	18,517	108.92	25,929	102.08%
12/10/2002	4	5	7,418	88.31	29	38	18,555	109.15	25,973	102.26%
12/11/2002	6	8	7,426	88.40	24	32	18,587	109.33	26,013	102.41%
12/12/2002	13	17	7,443	88.61	32	42	18,629	109.58	26,072	102.65%
12/13/2002	20	26	7,470	88.92	52	69	18,698	109.99	26,167	103.02%
12/14/2002	25	33	7,503	89.32	106	140	18,838	110.81	26,340	103.70%
12/15/2002	13	17	7,520	89.52	92	122	18,959	111.53	26,479	104.25%
12/16/2002	6	8	7,528	89.62	27	36	18,995	111.74	26,523	104.42%
12/17/2002	4	5	7,533	89.68	39	52	19,047	112.04	26,580	104.64%

12/18/2002	8	11	7,544	89.80	35	46	19,093	112.31	26,636	104.87%
12/19/2002	10	13	7,557	89.96	42	55	19,148	112.64	26,705	105.14%
12/20/2002	16	21	7,578	90.21	72	95	19,243	113.20	26,821	105.60%
<u>Kill Date</u>	<u>R</u>	<u>E</u>	<u>Cum</u>	<u>Cum</u>	<u>R</u>	<u>E</u>	<u>Cum</u>	<u>Cum</u>	<u>Cum</u>	<u>Cum</u>
	North	North	N	North %	South	South	S	South %	Harvest	Percent
			Harvest				Harvest			
12/21/2002	16	21	7,599	90.46	87	115	19,358	113.87	26,957	106.13%
12/22/2002	10	13	7,612	90.62	93	123	19,481	114.60	27,094	106.67%
12/23/2002	1	1	7,614	90.64	46	61	19,542	114.95	27,156	106.91%
12/24/2002		-	7,614	90.64	54	71	19,613	115.37	27,227	107.19%
12/25/2002		-	7,614	90.64	21	28	19,641	115.54	27,255	107.30%
12/26/2002		-	7,614	90.64	25	33	19,674	115.73	27,288	107.43%
12/27/2002		-	7,614	90.64	38	50	19,724	116.03	27,338	107.63%
12/28/2002		-	7,614	90.64	83	110	19,834	116.67	27,448	108.06%
12/29/2002		-	7,614	90.64	88	116	19,950	117.36	27,564	108.52%
12/30/2002		-	7,614	90.64	46	61	20,011	117.71	27,625	108.76%
12/31/2002		-	7,614	90.64	21	28	20,039	117.88	27,652	108.87%
01/01/2003		-	7,614	90.64		1	20,039	117.88	27,653	108.87%
01/02/2003		-	7,614	90.64		-	20,039	117.88	27,653	108.87%
01/06/2003		-	7,614	90.64		-	20,039	117.88	27,653	108.87%
Total	5,831	7,705	7,614	90.64	15,118	19,978	20,039	117.88	27,653	108.87%

* = Geese harvested during Youth Waterfowl Hunt September 21 & 22

Table 13. Weekday of reported kill in percent. Data from mandatory reporting in the Exterior zone and questionnaires in the other zones.

Zone/ Period	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Collins 1	29.4%	9.8%	13.7%	5.9%	11.8%	15.7%	13.7%
Collins 2	16.7%	10.3%	12.8%	9.8%	17.7%	12.8%	20.1%
Collins 3	15.7%	8.9%	13.3%	13.3%	8.9%	11.1%	28.9%
Collins Total	18.7%	10.0%	13.0%	9.7%	15.3%	13.0%	20.3%
Horicon 1	25.5%	7.7%	8.6%	6.5%	7.3%	10.9%	33.6%
Horicon 2	23.3%	7.8%	7.8%	7.5%	7.7%	13.0%	33.0%
Horicon 3	18.7%	9.1%	9.0%	8.6%	9.1%	13.9%	31.6%
Horicon 4	17.9%	8.3%	11.1%	9.0%	4.7%	12.9%	36.1%
Horicon Total	21.4%	8.3%	8.8%	7.9%	7.5%	12.9%	33.3%
Exterior	26.2%	9.2%	9.0%	9.0%	9.1%	9.8%	27.8%
Total	25.5%	9.1%	9.0%	8.9%	8.9%	10.3%	28.4%

Table 14. Percent success by active permit for the Horicon and Collins zone. Harvest figures were derived from questionnaire data.

Zone/Period	1 st Permit	2 nd Permit	3 rd Permit
Collins 1	96.3%	66.7%	48.2%
Collins 2	94.9%	73.5%	39.3%
Collins 3	93.3%	50.0%	26.7%
Horicon 1	56.8%	35.5%	19.3%

Horicon 2	57.3%	36.6%	21.2%
Horicon 3	50.6%	27.8%	16.7%
Horicon 4	54.9%	36.2%	15.9%

Table 15. *Percent of successful bags containing 1 or 2 geese.*

Zone	Period	Percent of 1 Kill Bags	Percent of 2 Kill Bags
Collins	1	73.6%	26.4%
	2	79.4%	20.6%
	3	85.1%	14.9%
	All Periods	79.3%	20.7%
Horicon	1	73.6%	26.3%
	2	77.2%	22.9%
	3	78.8%	21.2%
	4	68.5%	31.5%
	All Periods	75.6%	24.4%

Table 16. *Number of birds harvested per permit holder and active permit holder by zone. Hunter numbers derived from applications, questionnaires and 1-800 registration.*

Zone	Birds/Permit Holder	Birds/Active Permit Holder
Collins	1.25	2.02
Horicon	0.68	0.91
Exterior	0.31	N/A

Table 17. *Exterior Zone season bag derived from mandatory reporting data (continued on the next page).*

Bag	Hunters	Percent
0	79,332	89.3%
1	5,161	5.8%
2	2,154	2.4%
3	835	0.9%
4	468	0.5%
5	272	0.3%
6	160	0.2%
7	109	0.1%
8	82	0.1%
9	75	0.1%
10	45	0.1%
11	26	0.0%
12	17	0.0%
13	9	0.0%
14	23	0.0%

15	16	0.0%
16	7	0.0%
17	9	0.0%
18	6	0.0%
19	1	0.0%
20	4	0.0%
21	6	0.0%
22	2	0.0%
23	2	0.0%
26	2	0.0%
27	2	0.0%
31	1	0.0%
32	1	0.0%
37	1	0.0%
42	1	0.0%
43	1	0.0%
45	1	0.0%
46	1	0.0%

Table 18. *Percent of time spent hunting private land by zone.*

Zone	No Answer	< 25%	25-49%	50-75%	> 75%
Collins	38.9%	43.1%	0.3%	1.0%	16.7%
Horicon	28.2%	13.2%	1.6%		

Table 19. *Reported use of the Intensive Management Subzone (IMS) in the Horicon Zone by time period.*

Period	Percent of hunters using the IMS	Mean percent of time spent in the IMS
1	37.0%	91.2%
2	33.7%	91.3%
3	34.2%	87.0%
4	28.3%	89.3%
Overall	33.3%	89.6%

Table 20. *Number of active hunters, percent paying blind access fee, mean days hunted, mean payment per trip, and total access fees paid by zone.*

Zone	Active Hunters	% Paying	Mean Days	Mean Payment	Total Paid
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Collins	295	17.2%	4.7	\$9.52	\$2,270.31
Horicon	15,797	33.9%	3.2	\$10.13	\$173,593.61

Table 21. *Number applicants, active hunters, and birds harvested during the September early Canada goose season.*

Year	# of Applicants	# of Active Hunters	Harvest
1990	19,561	6,408	842
1991	4,772	1,983	712
1992	5,383	2,024	772
1993	2,982	1,636	679
1994	20,724	7,114	1,668
1995	13,343	7,923	4,928
1996	21,378	8,979	10,506
1997	28,761		7,435
1998	29,580		7,627
1999	73,799		6,032
2000	69,716		11,192
2001	74,268		15,952
2002	75,565		11,678

Table 22. *Early September Canada goose harvest by date (bold numbers indicate weekends).*

Date of Kill	Reported Harvest	Expanded Harvest	Percent	Cumulative Harvest	Cumulative Percent
09/03/2002	2,067	2,687	23.0%	2,687	23.0%
09/04/2002	1,036	1,347	11.5%	4,034	34.5%
09/05/2002	610	793	6.8%	4,827	41.3%
09/06/2002	528	686	5.9%	5,513	47.2%
09/07/2002	878	1,141	9.8%	6,655	57.0%
09/08/2002	678	881	7.5%	7,536	64.5%
09/09/2002	295	384	3.3%	7,920	67.8%
09/10/2002	368	478	4.1%	8,398	71.9%
09/11/2002	451	586	5.0%	8,984	76.9%
09/12/2002	269	350	3.0%	9,334	79.9%
09/13/2002	330	429	3.7%	9,763	83.6%
09/14/2002	600	780	6.7%	10,543	90.3%
09/15/2002	873	1,135	9.7%	11,678	100.0%
Total	8,983	11,678			

Table 23. *Early September Canada goose harvest by county (continued on next two pages).*

County	Reported Kill	Expanded Kill	Percent
Adams	20	26	0.2%

County	Reported Kill	Expanded Kill	Percent
Ashland	13	17	0.1%
Barron	207	269	2.3%
Bayfield	31	40	0.3%
Brown	512	666	5.7%
Buffalo	79	103	0.9%
Burnett	146	190	1.6%
Calumet	72	94	0.8%
Chippewa	150	195	1.7%
Clark	27	35	0.3%
Columbia	75	98	0.8%
Crawford	70	91	0.8%
Dane	311	404	3.5%
Dodge	280	364	3.1%
Door	407	529	4.5%
Douglas	43	56	0.5%
Dunn	33	43	0.4%
Eau Claire	14	18	0.2%
Florence	5	7	0.1%
Fond Du Lac	101	131	1.1%
Forest	3	4	0.0%
Grant	12	16	0.1%
Green	4	5	0.0%
Green Lake	42	55	0.5%
Iowa	13	17	0.1%
Iron	30	39	0.3%
Jackson	35	46	0.4%
Jefferson	352	458	3.9%
Juneau	69	90	0.8%
Kenosha	235	306	2.6%
Kewaunee	294	382	3.3%
La Crosse	77	100	0.9%
Lafayette	8	10	0.1%
Langlade	6	8	0.1%
Lincoln	13	17	0.1%
Manitowoc	647	841	7.2%
Marathon	96	125	1.1%
Marinette	103	134	1.1%
Marquette	23	30	0.3%
Monroe	51	66	0.6%
Oconto	62	81	0.7%
Oneida	44	57	0.5%
Outagamie	212	276	2.4%
Ozaukee	194	252	2.2%
Pepin	4	5	0.0%
Pierce	7	9	0.1%
Polk	213	277	2.4%
Portage	96	125	1.1%
Price	80	104	0.9%
Racine	210	273	2.3%

County	Reported Kill	Expanded Kill	Percent
Richland	44	57	0.5%
Rock	291	378	3.2%
Rusk	71	92	0.8%
St. Croix	22	29	0.2%
Sauk	44	57	0.5%
Sawyer	23	30	0.3%
Shawano	457	594	5.1%
Sheboygan	120	156	1.3%
Taylor	56	73	0.6%
Trempealeau	240	312	2.7%
Vernon	10	13	0.1%
Vilas	27	35	0.3%
Walworth	373	485	4.2%
Washburn	175	228	1.9%
Washington	389	506	4.3%
Waukesha	367	477	4.1%
Waupaca	73	95	0.8%
Waushara	30	39	0.3%
Winnebago	164	213	1.8%
Wood	176	229	2.0%
Total	8,983	11,678	

Table 24. *Early September season bag derived from mandatory reporting data.*

Bag	Hunters	Percent
0	72,630	96.1%
1	956	1.3%
2	652	0.9%
3	494	0.7%
4	248	0.3%
5	250	0.3%
6	98	0.1%
7	68	0.1%
8	56	0.1%
9	28	0.0%
10	27	0.0%
11	16	0.0%
12	10	0.0%
13	10	0.0%
14	4	0.0%
15	7	0.0%
16	4	0.0%
17	3	0.0%
18	2	0.0%
19	1	0.0%
20	3	0.0%

22	2	0.0%
23	2	0.0%
24	1	0.0%
34	1	0.0%

Table 25. All Seasons Combined-Canada Goose Harvest by County (continued on next page)

County	Exterior	Collins	Horicon	Early Sept	Total	Percent
Adams	348			26	374	0.69
Ashland	77			17	94	0.17
Barron	385			269	654	1.20
Bayfield	91			40	131	0.24
Brown	1,597			666	2263	4.17
Buffalo	280			103	383	0.71
Burnett	381			190	571	1.05
Calumet	304			94	398	0.73
Chippewa	595			195	790	1.45
Clark	487			35	522	0.96
Columbia	333		446	98	877	1.62
Crawford	81			91	172	0.32
Dane	1,125			404	1529	2.82
Dodge	970		7,848	364	9182	16.91
Door	488			529	1017	1.87
Douglas	123			56	179	0.33
Dunn	125			43	168	0.31
Eau Claire	206			18	224	0.41
Florence	28			7	35	0.06
Fond du Lac	161		3,162	131	3454	6.36
Forest	13			4	17	0.03
Grant	265			16	281	0.52
Green	92			5	97	0.18
Green Lake	0		1,840	55	1895	3.49
Iowa	34			17	51	0.09
Iron	37			39	76	0.14
Jackson	55			46	101	0.19
Jefferson	623			458	1081	1.99
Juneau	352			90	442	0.81
Kenosha	550			306	856	1.58
Kewaunee	1,076			382	1458	2.69
La Crosse	222			100	322	0.59
Lafayette	102			10	112	0.21
Langlade	82			8	90	0.17
Lincoln	279			17	296	0.55
Manitowoc	1,836	596		841	3273	6.03
Marathon	290			125	415	0.76
Marinette	335			134	469	0.86

Marquette	581		374	30	985	1.81
Menominee	0			0	0	0.00
Milwaukee	13			0	13	0.02
Monroe	239			66	305	0.56
County	Exterior	Collins	Horicon	Early Sept	Total	Percent
Oconto	337			81	418	0.77
Oneida	91			57	148	0.27
Outagamie	1,139			276	1415	2.61
Ozaukee	525			252	777	1.43
Pepin	110			5	115	0.21
Pierce	387			9	396	0.73
Polk	561			277	838	1.54
Portage	247			125	372	0.69
Price	87			104	191	0.35
Racine	727			273	1000	1.84
Richland	36			57	93	0.17
Rock	462			378	840	1.55
Rusk	173			92	265	0.49
Sauk	133			57	190	0.35
Sawyer	181			30	211	0.39
Shawano	232			594	826	1.52
Sheboygan	917			156	1073	1.98
St.Croix	651			29	680	1.25
Taylor	342			73	415	0.76
Trempealeau	327			312	639	1.18
Vernon	50			13	63	0.12
Vilas	168			35	203	0.37
Walworth	675			485	1160	2.14
Washburn	424			228	652	1.20
Washington	531		532	506	1569	2.89
Waukesha	923			477	1400	2.58
Waupaca	601			95	696	1.28
Waushara	467			39	506	0.93
Winnebago	504		172	213	889	1.64
Wood	381			229	610	1.12
Unknown	3				3	0.01
TOTAL	27653	596	14374	11678	54301	

Appendix 1. Establishing harvest quotas for the regular Canada goose season

A number of our Canada goose hunters suggested that we include a section on how Canada goose harvest quotas are set, in this year's harvest report. We agree that it would be of value to include a brief explanation of that process in this report.

We have two distinct Canada goose hunting seasons in Wisconsin. The Early September season which currently occurs statewide September 1 –15 exclusive of the Labor Day weekend, and the regular season. Since the Early September season occurs before migrant goose populations from Canada arrive in the state, the harvest during this season does not count against our regular season quota. Currently, the quota applies only to seasons that occur on or after September 16, annually.

Our regular Canada goose season (that which begins on or after September 16 each year) is determined by the status of the Mississippi Valley Population (MVP) of Canada geese which nest on the Hudson Bay and James Bay lowlands, primarily in Ontario. Currently, band recoveries indicate that MVP geese make up about 68% of our regular season harvest. Annually, the U.S. Fish and Wildlife Service (FWS) establishes a maximum allowable harvest for this population, based on a recommendation from the Mississippi Flyway Council (MFC). The level of harvest is based on an estimate of the spring population (breeders and non-breeders) on the breeding grounds in northern Ontario and subsequent gosling production. The annual allowable harvest objective is set with the goal of having a spring breeding population of 375,000 for MVP Canada geese.

Once an allowable harvest level is set on the population, that harvest is allocated to major and other harvest states and provinces. Annually, about 80,500 MVP geese are allocated to the "other" harvest states and provinces. The balance of the allowable harvest is then allocated to the four major MVP harvest states as follows: Wisconsin-35%; Illinois-33%; Michigan-20%; Kentucky-12%. In 2002, our MVP maximum allowable harvest was 29,925.

During the regular season, we know that not all Canada geese harvested in Wisconsin are migrant MVP Canada geese. From band recoveries reported by hunters, we currently estimate that during the regular season, about 68% of the Canada geese harvested in Wisconsin are MVP geese, 29% are giants and about 3% belong to other migrant Canada goose populations. We account for this in our overall regular season Canada goose maximum allowable harvest. This year, our total maximum allowable Canada goose harvest was 44,000 (29,925 divided by 0.68).

We then allocate our total maximum allowable harvest to the 3 zones, taking in to consideration, number of hunters in each zone, bag limits, and season lengths. We also need to ensure that the Horicon Zone's quota is sufficient to address farmer concerns for agricultural crop damage. In 2002, about 57.7% (25,400) of the allowable harvest was assigned to the Exterior Zone, 41% (18,000) to the Horicon Zone and the balance (600) to the Collins Zone.

We hope this explanation helps you understand how our quotas work.